UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,057	08/30/2001	Gregor P. Freund	VIV/0003.01	8336

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EXAMINER
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ART UNIT	PAPER NUMBER
2151	

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10/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	09/944,057	FREUND ET AL.
	Examiner	Art Unit	
	KAMAL B. DIVECHA	2151	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 August 2007</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-64</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-64</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claims 1-64 are pending in this application.

Re-opening Prosecution

In view of the Appeal Brief filed on August 2, 2007, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 41 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 7, 41 and 52, the phrase "others" renders the claim(s) indefinite because it is unclear which one of the plurality of clients the term is referring to, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1.   Claims 1-5, 7-12, 17-22, 24, 27-29, 31-33, 35-39, 45-55, 57 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockwell et al. (hereinafter Stockwell, US 5,950,195) in view of Elliot (US 7,145,898 B1).

As per claim 1, Stockwell discloses a system comprising one or more client computers connected to the Internet by client premises equipment serving a routing function for client computers (fig. 1: the computers connected to internal network, col. 4 L21-42: a firewall

gateway), a method for managing Internet access based on a specified access policy (col. 1 L5-10, col. 3 L16-54, col. 5 L16-22: access policies), the method comprising:

a challenge/response sequence for determining whether a given client computer is in compliance with said specified access policy (col. 5 L16 to col. 6 L67, col. 9 L1-60);

blocking Internet access for any client computer that does not respond appropriately to said challenge (col. 5 L16 to col. 6 L67, col. 9 L1-60: blocking the Internet access by dropping the connection, col. 11 L5-67).

However, Stockwell does not explicitly disclose the process of transmitting a challenge from said client premises equipment to each client computer and transmitting a response from at least one client computer back to said client premises equipment for responding to challenge that has been issued (Note: Even though the limitations are obvious in Stockwell, Elliot is relied upon for teaching these limitations).

Elliot explicitly discloses an Internet access device that performs the process of transmitting a challenge from said client premises equipment to each client computer and transmitting a response from at least one client computer back to said client premises equipment for responding to challenge that has been issued (col. 265 L46 to col. 266 L60: Internet Access Device transmitting challenge and receiving response from client computer).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stockwell (if necessary) in view of Elliot in order transmit a challenge to the client computer and receiving a response to the challenge.

One of ordinary skilled in the art would have been motivated because it would have

authenticated the user and/or connection (See Stockwell: col. 9 L1-60, Elliot: col. 265 L46 to col.

266 L60).

As per claim 2, Stockwell discloses the process wherein a client computer that does not

respond at all is blocked from Internet access (col. 5 L16 to col. 6 L67, col. 9 L1-60: blocking

the Internet access by dropping the connection; its also obvious that if the client doesn't respond

to the username/pswd prompt, the client will not be allowed to access the Internet).

As per claim 3, Stockwell discloses the process wherein a client computer that responds

with a particular predefined code indicating non-compliance is blocked from Internet access (i.e.

invalid response, col. 5 L16 to col. 6 L67, col. 9 L1-60: its obvious that if client responds to the

challenge with incorrect information or code, the client will be blocked or not allowed to access

the Internet).

As per claim 4, Stockwell discloses the process wherein a client computer that responds

with a particular predefined code indicating compliance is permitted Internet access (col. 5 L16

to col. 6 L67, col. 9 L1-60).

As per claim 5, Stockwell discloses the process wherein before a receipt of a challenge,

transmitting an initial message from a particular client computer to the client premises equipment

for requesting the client premises equipment to transmit a challenge to that particular client

computer (i.e. transmitting an initial connection request message that enables the firewall to send

the challenge, col. 5 L53 to col. 6 L67, col. 8 L38 to col. 9 L60, col. 14 L5-55).

As per claim 7, Stockwell discloses the process wherein client premises equipment is

capable of permitting Internet access by selected client computers and denying access to other

client computers (col. 10 L12 to col. 11 L46, col. 11 L47 to col. 13 L67: several examples of

ACLS, col. 8 L38-45).

As per claim 8, Stockwell disclose the process wherein access policy specifies rules that

govern Internet access by the client computers (fig. 5, col.1 L40 to col. 2 L67, col. 5 L16-46, col.

6 L46 to col. 7 L67, col. 10 L12 to col. 11 L67).

As per claim 9, Stockwell discloses the process of determining whether permitting

Internet access for a given client computer would violate any of rules and if permitting such

Internet access would violate any of said rule, denying Internet access for that client computer

(fig. 5, col.1 L40 to col. 2 L67, col. 5 L16-46, col. 6 L46 to col. 7 L67, col. 10 L12 to col. 11

L67: its obvious that this determination will be made in order to deny or allow the Internet

access).

As per claim 10, Stockwell discloses the process wherein access policy includes rules that

are enforced against selected ones of users, computers and groups thereof (col. 10 L12 to col. 11

L67).

As per claim 11, Stockwell discloses the process wherein said access policy specifies

which applications are allowed Internet access (col. 5 L16-22, col. 7 L1-45, col. 8 L20-30: ftp

and http type of accesses, col. 10 L12-67: Matching criteria for rule including: a list of service

names such as ftp or http, in other words, a list of applications).

As per claim 12, Stockwell discloses the process wherein said access policy specifies

applications that are allowed Internet access (col. 5 L16-22, col. 7 L1-45, col. 8 L20-30: ftp and

http type of accesses, col. 10 L12-67: Matching criteria for rule including: a list of service names

such as ftp or http, in other words, a list of applications).

As per claim 17, Stockwell discloses the process wherein said access policy specifies

Internet access activities that are permitted or restricted for applications or version thereof (col. 5

L16-22, col. 7 L1-45, col. 8 L20-30: for http, types of URLs blocked, col. 10 L12-67, col. 11

L35-41, col. 14 L13-24).

As per claim 18, Stockwell discloses the process wherein said access policy specifies

rules that are transmitted to client computers from a remote location (col. 8 L38 to col. 9 L60,

col. 11 L5-67).

As per claim 19, Stockwell discloses the process wherein the remote location comprises a

centralized location for maintaining said access policy (col. 5 L35-46, col. 7 L1-67, col. 8 L38 to

col. 9 L60, col. 11 L5-67: a relational database).

As per claim 20, Stockwell discloses the process wherein the process of blocking Internet

access includes determining, based on identification of a particular client computer or group

thereof, a specific subset of rules filtered for that particular client computer or group thereof (col.

5 L16 to col. 6 L67, col. 7 L1-67, col. 8 L38 to col. 9 L1-60, col. 10 L12 to col. 11 L67, col. 13

L11 to col. 14 L55).

As per claim 21, Stockwell discloses the process wherein challenge includes a request for

a particular client computer to respond as to whether it is in compliance with said access policy

(col. 5 L16 to col. 6 L67, col. 9 L1-60).

As per claim 22, Stockwell discloses the process of redirecting a client computer that is

not in compliance with said access policy to a sandbox server (i.e. a server, col. 7 L45 to col. 8

L20, col. 11 L5 to col. 12 L44) and informing client computer that it is not in compliance with

said access policy (col. 9 L1 to col. 10 L8: sending a warning message to the client in response to denied connection).

As per claim 46, Stockwell discloses the system wherein said client premises equipment includes a router (col. 4 L8-42).

As per claim 47, Stockwell discloses the system wherein said access policy is provided at client computer to be regulated (col. 3 L18-54, col. 5 L16-67).

As per claim 48, Stockwell discloses the system wherein enforcement module is provided at client premises equipment (fig. 2, col. 4 L21-42, col. 5 L16-67).

As per claims 24, 27-29, 31-33, 35-39, 45, 49-55, 57, 61, they do not teach or further define over the limitations 1-5, 7-12, 17-22, 46-48. Therefore claims 24, 27-29, 31-33, 35-39, 45, 49-55, 57, 61 are rejected for the same reasons as set forth in claims 1-5, 7-12, 17-22, 46-48.

2.   Claims 6 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockwell et al. (hereinafter Stockwell, US 5,950,195) in view of Elliot (US 7,145,898 B1), and further in view of Kadyk et al. (hereinafter Kadyk, US 6,996,841 B2).

As per claim 6, Stockwell in view of Elliot does not disclose the process wherein the initial message comprises a "client hello" packet.

Kadyk explicitly discloses the process of sending the "client hello" packet to the server (fig. 3A, col. 10 L20-52).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stockwell in view of Elliot and further in view of Kadyk in order send a client hello packet.

One of ordinary skilled in the art would have been motivated because it would have created a secured session (col. 10 L20-52).

As per claim 30, it does not teach or further define over the limitations in claim 6. Therefore claim 30 is rejected for the same reasons as set forth in claim 6.

3.   Claims 13-16, 34, 42-44, 56 and 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockwell et al. (hereinafter Stockwell, US 5,950,195) in view of Elliot (US 7,145,898 B1), and further in view of "Official Notice".

As per claim 13, Stockwell in view of Elliot disclose the process wherein the applications are specified by executable name (col. 13 L10-67, col. 12 L10-67).

However, Stockwell in view of Elliot does not disclose the process wherein the applications are specified by version number.

But, application name and the version number are two common parameters used in the art for identifying applications.

Therefore, Official Notice is taken to indicate that specifying the applications by executable name and version number is well known in the art.

As such, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stockwell and Elliot in order to use the executable name and version number of the applications.

One of ordinary skilled in the art would have been motivated because these are common parameters used for identifying the applications.

As per claims 14-16, Stockwell in view of Elliot does not disclose the process wherein the applications are specified by digital signatures, wherein the digital signatures are computed using cryptographic hash, and wherein the cryptographic hash comprises one of Secure Hash algorithm (SHA-1) and MD5 cryptographic hashes.

But, Secure Hash algorithm (SHA-1) and MD5 cryptographic hashes, digital signatures are all well known in the art, as explicitly admitted by the applicant (see specification, pg. 29 lines 14-31, pg. 10 lines 24-41).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stockwell and Elliot in order to specify the applications using hashing techniques.

One of ordinary skilled in the art would have been motivated because it would have provided secure communications.

As per claims 34, 42-44, 56 and 58-60, they do not teach or further define over the limitations in claims 13-16. Therefore, claims 34, 42-44, 56 and 58-60 are rejected for the same reasons as set forth in claims 13-16.

4.   Claims 23, 25, 26, 40, 41 and 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockwell et al. (hereinafter Stockwell, US 5,950,195) in view of Elliot (US 7,145,898 B1), and further in view of Shrader et al. (hereinafter Shrader, US 6,026,440).

As per claim 23, Stockwell in view of Elliot discloses the process of redirecting the client computer that is not in compliance with said access policy to a particular port on the sandbox server (i.e. an alternate machine or server, col. 7 L45 to col. 8 L20, col. 11 L5 to col. 12 L44).

However, Stockwell in view of Elliot does not disclose the process of displaying error message pages on the sandbox server in response to communications on particular ports.

Shrader explicitly discloses the process of displaying error messages on a server if the request fails (col. 4 L40-67, obviously the request will fail on a particular machine or port, in this case at the web server port).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stockwell in view of Elliot and further in view of Shrader in order to display the error messages on the sandbox server or alternate server.

One of ordinary skilled in the art would have been motivated because it would have notified the client computer of the denial of the service (Shrader, col. 4 L56-667). It would have also improved the routers performance by redirecting the unauthorized client computers to alternate server.

As per claim 26, Stockwell in view of Elliot does not disclose the process wherein after displaying error message, permitting said client to elect to access the Internet.

Shrader discloses the process of displaying the error in response to inappropriate credentials and allowing the client to elect or to access the Internet by prompting the user (col. 4 L56-67).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stockwell in view of Elliot and further in view of Shrader in order to enable the client to elect to access the Internet.

One of ordinary skilled in the art would have been motivated because it would have provided the client computer another opportunity to access the Internet.

As per claims 25, 40, 41 and 62-64, they do not teach or further define over the

limitations in claims 23 and 26. Therefore claims 25, 40, 41 and 62-64 are rejected for the same

reasons as set forth in claims 23 and 26.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

a.   RFC 1321: MD5 Cryptographic algorithm.

b.   Davis et al., US 6,088,450: Authentication System based on periodic

challenge/response protocol.

c.   Abraham et al., US 5,983,270: Method and Apparatus for Managing Internetwork

and Intranetwork activity: A Router and/or Firewall for managing Internet Access.

d.   Nykanen et al., US 6,594,483: discloses using the application names for

identifying purposes.

e.   Hammond, US 5,974,470: discloses using the version number for applications in

setting rules.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-

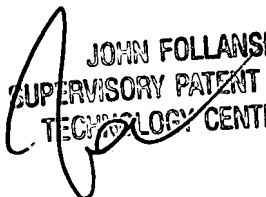5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kamal Divecha/

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Art Unit 2151
October 16, 2007.

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